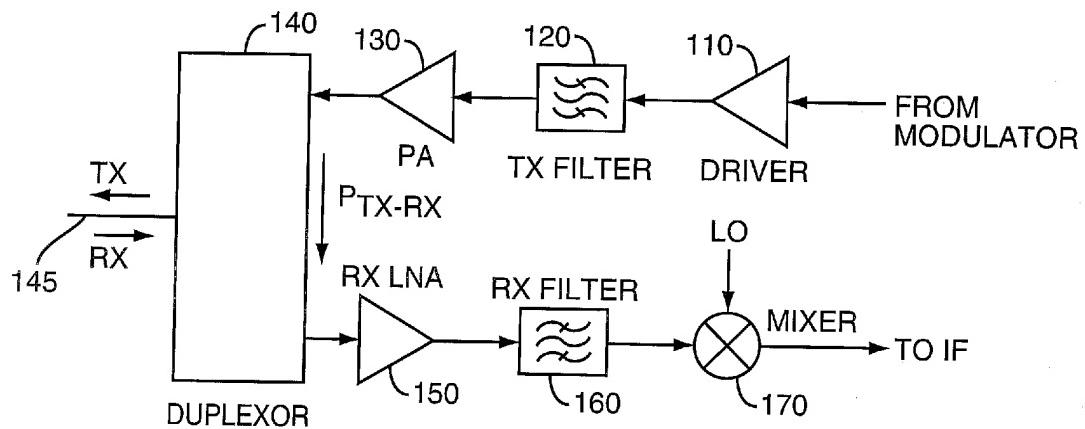
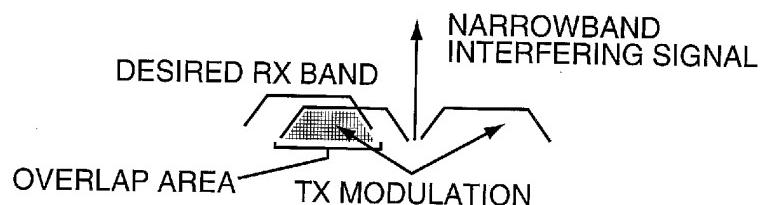


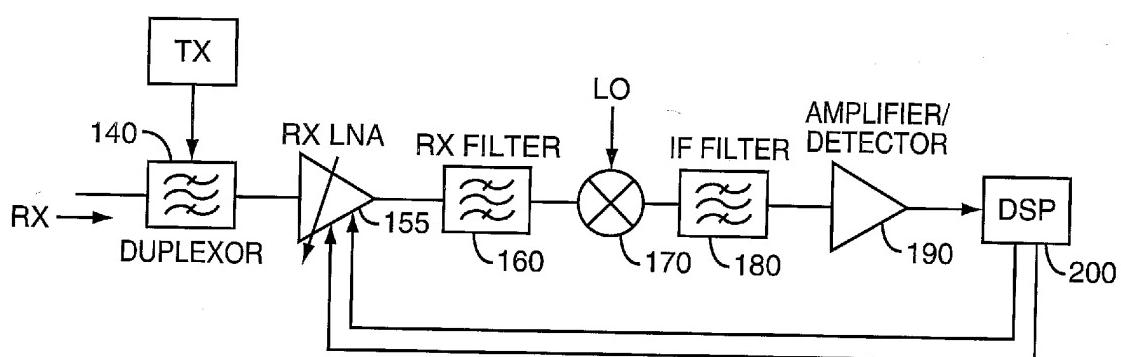
REPLACEMENT SHEET



**FIG. 1**  
**PRIOR ART**

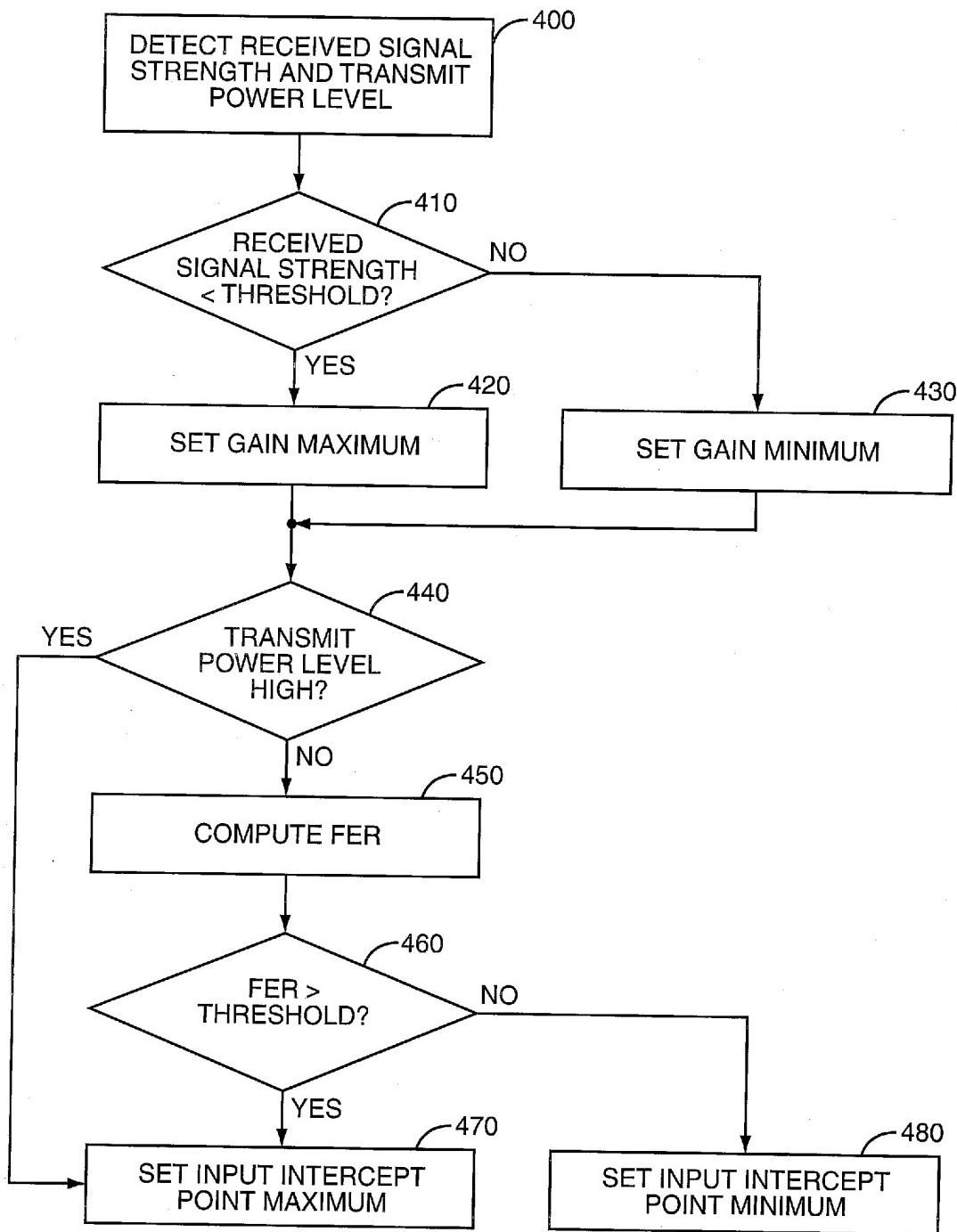


**FIG. 2**  
**PRIOR ART**



**FIG. 3**

REPLACEMENT SHEET



**FIG. 4**

REPLACEMENT SHEET

CDMA Receiver System Calculator

TITLE: Typical IS-95 CDMA Receiver, Operational State 1

VERSION 1.10

DUPLEXOR RX LNA RX FILTER MIXER IF FILTER

G@ f0 in dB	-4.8	15	-3	15	-10	50
G@ f1 in dB	-4.8	15	-3	15	-45	50
G@ f2 in dB	-4.8	15	-3	15	-50	50
IP <sub>i</sub> in dBm	100	15	100	3	100	-40
NF in dB	4.8	2	3	7	10	5

Calculated System Parameters —

System BW [kHz]	1250
Eb/No Required [dB]	4.5
Processing Gain [dB]	21.07
Traffic Ch. Offset [dB]	-15.60

System NF = 7.65 dB  
System IP<sub>i</sub> = -5.00 dBm  
Sensitivity = -106.32 dBm  
System Gain = 62.2 dB

FIG. 5A

REPLACEMENT SHEET

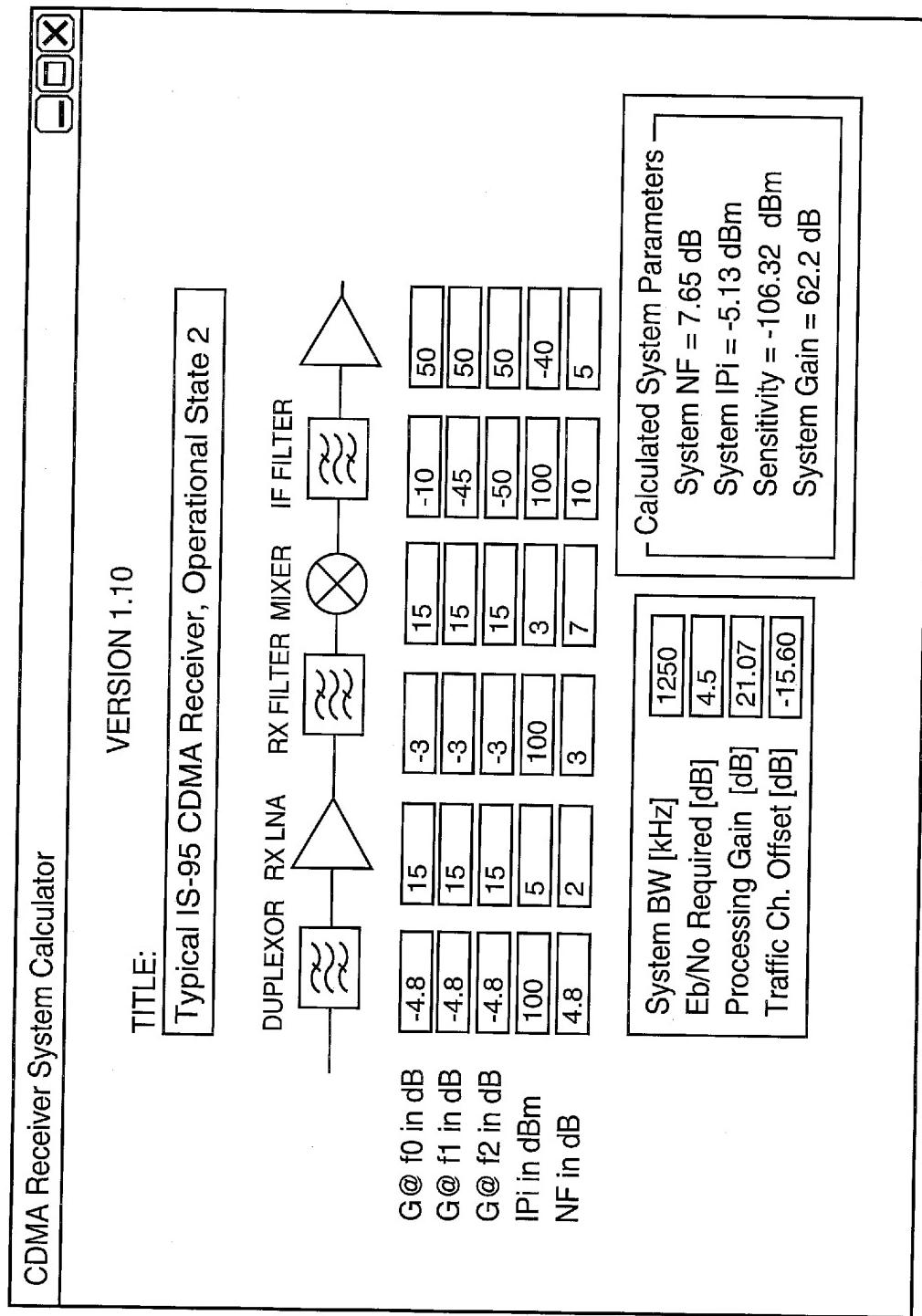


FIG. 5B

REPLACEMENT SHEET

CDMA Receiver System Calculator	
<input type="checkbox"/> <input type="checkbox"/> <input checked="" type="checkbox"/>	
TITLE:	VERSION 1.10
Typical IS-95 CDMA Receiver, Operational State 3	
<pre> graph LR     Duplexer[DUPLEXOR] --&gt; RXLNA[RX LNA]     RXLNA --&gt; RXFilterMixer[RX FILTER MIXER]     RXLNA --&gt; IFFilter[IF FILTER]     RXFilterMixer --&gt; Output     IFFilter --&gt; Output   </pre>	
G @ f0 in dB	-4.8
G @ f1 in dB	-4.8
G @ f2 in dB	-4.8
IPI in dBm	100
NF in dB	4.8
	22
	3
	7
	100
	3
	100
	3
	15
	15
	15
	15
	15
	10
	5
	50
	50
	50
	40
	10
	5

Calculated System Parameters —

System BW [kHz]	1250
Eb/No Required [dB]	4.5
Processing Gain [dB]	21.07
Traffic Ch. Offset [dB]	-15.60

**FIG. 5C**

## **REPLACEMENT SHEET**

CDMA Receiver System Calculator

TITLE: Typical IS-95 CDMA Receiver, Operational State 4

VERSION 1.10

	DUPLEXOR	RX LNA	RX FILTER	MIXER	IF FILTER	
G @ f0 in dB	-4.8	-5	-3	15	-10	50
G @ f1 in dB	-4.8	-5	-3	15	-45	50
G @ f2 in dB	-4.8	-5	-3	15	-50	50
IPI in dBm	100	15	100	3	100	-40
NF in dB	4.8	22	3	7	10	5

Calculated System Parameters —

- System NF = 27.6 dB
- System IPI = 13.7 dBm
- Sensitivity = -86.323 dBm
- System Gain = 42.2 dB

System BW [kHz]

1250
4.5
21.07
-15.60

Eb/No Required [dB]

Processing Gain [dB]

Traffic Ch. Offset [dB]